Fig. 5. Transverse section through the clitellum of the same, to show the unicellular layer of the epidermis and the hollow fibres of the transverse muscular coat.
6. Ventral view of the genital segments of *Benhamia crassa*; the clitellum is shaded and the groove connecting the atrial pores is shown.
7. Spermatotheca of the same.
8. Calciferous glands of *Microdrilus asiaticus*.
9, 10. Genital setæ of *Acanthodrilus smithi*, in lateral and ventral view.
11. A rudimentary calciferous gland of *Eudriloides durbanensis*.
12. A spermatotheca of *Acanthodrilus smithii*.
13. A penial seta of *Microdrilus asiaticus*.
14. Genital organs of *Eudriloides durbanensis*; the segments are numbered.

2. On the Presence of a Branchial Basket in *Myxine glutinosa*. By R. H. Burne, B.A., F.Z.S., Anatomical Assistant at the Royal College of Surgeons of England.

[Received December 6, 1892.]

(Plate XLVII.)

One would expect the branchial basket, which forms such a large and striking part of the skeleton of the Lampreys, to be present, at least to some extent, in their nearest allies, the Hags; and, in fact, such is the case, for in 1835 Johannes Müller, in his work upon the Myxinoids[1], described and figured a small triradiate piece of cartilage supporting the anterior and dorsal faces of the cutaneo-œsophageal duct of *Bdellostoma*, which cartilageno doubt is the homologue of a branchial basket. Again, in 1883 Parker[2] mentioned this cartilaginous support to the cutaneo-œsophageal duct of *Bdellostoma*, representing it as an irregular plate having the same position as Müller's triradiate cartilage.

Manifestly, as far as *Bdellostoma* is concerned, there is a branchial skeleton which, although present on one side only, cannot well be anything but a branchial basket in a very much reduced condition. This being the case, one would naturally expect to find some such supporting structure to the gill-tubes of *Myxine glutinosa*, but neither Müller, Parker, nor, as far as I can discover, any other observer has found anything answering to it; I fancy, however, that Müller implies in a passage which I quote below[3] that he believed that some such branchial skeleton was present, although he was unable to actually demonstrate it.

While lately preparing a series of Marsipobranch skeletons for the Museum of the Royal College of Surgeons, I naturally was on the look-out for this cartilage both in *Bdellostoma* and *Myxine*.

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[1] J. Müller, 'Vergleichende Anatomie der Myxinoiden' (Berlin, 1835), p. 122.

[2] W. K. Parker, "On the Skeleton of the Marsipobranch Fishes.—Pt. I. Myxinoids," Phil. Trans. 1883.

[3] *L. c.* p. 122. "Dieser Knorpel (in *Bdellostoma*) ist sehr zart und dünn, und kann bei *Myxine*, wegen der Feinheit der Theile, nicht mehr nachgewiesen werden."

Fig. 1

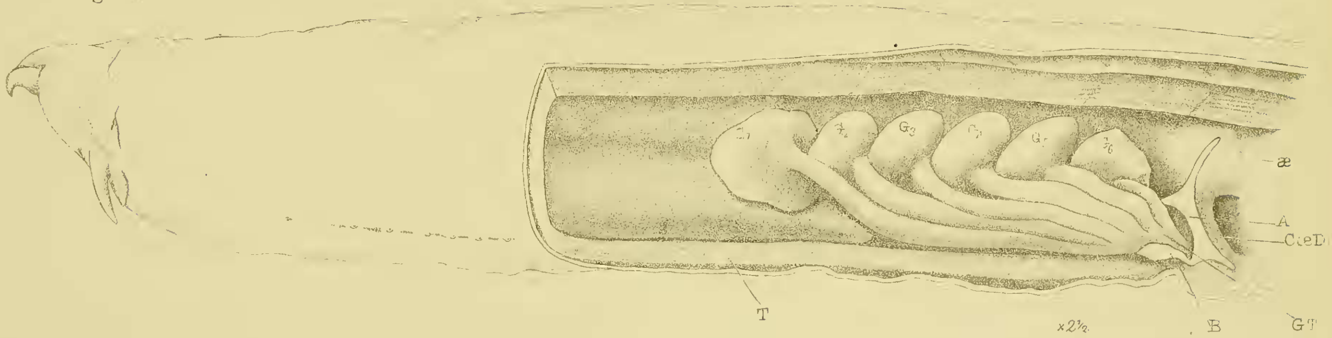

Fig. 2

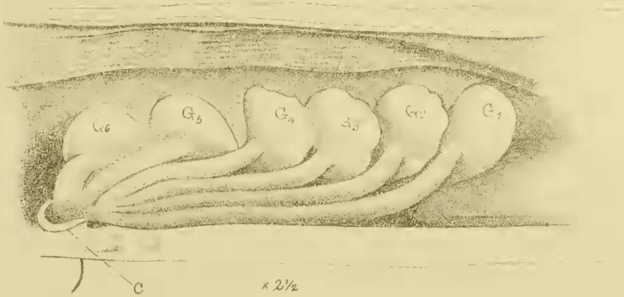

Fig. 3.

Fig. 4.

Fig. 5.

Fig. 6.

nat. size

R. H. B. delᵗ
M. P. Parker lith.

Structure of Myxine glutinosa

West, Newman imp.